

RELMAT SOLID WOOD FLOORING

ZEUS LINE

- OAK -

TECHNICAL SPECIFICATIONS

1. General Technical Characteristics of RELMAT Zeus Line

ZEUS Line of RELMAT consists of a series of prefinished hardwood floors that come from natural wood and can be offered in several species (Oak, Kempas, Merbau, Teak, Bamboo). The choice for a wooden floor usually depends on the desired colour as well as the use of the area.

With tongue & groove system, cut by diamond-tip tooling, RELMAT Solid Parquet gives a uniform and stable fit whether you nail, glue or float the installation.

As a prefinished product, the varnish is laid on all sides of the plank and under the following structure: 5 layers, plus 2 layers from Aluminum Oxide on the top surface and 2 layers on the bottom and the sides. The main reason for this structure is to ensure the total protection of the parquet, as the varnish - made from German company TREFFERT - is known for providing:

1. Resistance to scratches
2. Resistance to moisture
3. Protection against wood bacteria
4. Impact resistance
5. Resistance to household materials, stains, etc
6. Resistance to cigarette burns
7. Resistance to UV rays





1.2 OAK – The tree

Scientific Name: *QUERCUS Spp.*

Oak is a big and imposing tree of the temperate zone. Its height reaches 30m, while its diameter might exceed 1m.

Oak flooring is one of the strongest and most stable floors, ideal both for residential and commercial uses. The color is from light yellow to light brown, while its grains can be equal or straight, depending on the way the log is cut. The existence of knots is another characteristic of the wood that makes it more interesting and suitable for different aesthetic uses. Grade A is offered without any knots or color variation (equal or straight grains), Grade B is offered with small knots up to 4mm and little color variation and Grade C is offered with knots bigger than 4mm, color variation and sapwood.

Oak flooring in RELMAT is offered in two colors: the standard light yellow (natural) and the dark brown (antique). Additionally, in the antique color, RELMAT offers the Hand-scraped floor with a non-even surface which gives the impression of a naturally old parquet.

2. Dimensions of RELMAT Solid Oak

Width:	82.55mm or 120mm or 125mm
Length:	400-1500mm or 910mm
Thickness:	18mm
Grade:	GRADE A, B, C and ABC.
Edges:	TONGUE AND GROOVE (T & G), Tongue width: 4.63mm

3. Technical Specifications of RELMAT Solid Oak

Moisture Content	8%-12%
Gloss Degree	26.7%
Specific Gravity (kgr/m ³)	0.68
Compression (lbf/in ²)	
Parallel	7,440
Perpendicular	1,070
Modulus of Elasticity * (MPa)	12.273
Hardness Janka	1210

*: at 12% moisture content; 1 MPa = 1N/mm²

Source: CIRAD Forestry Department, National Wood Floor Association, AHEC Europe Center for Wood Anatomy Research



Technical Specifications of TREFFERT Varnish

Test	Standard	Classification
Acetic acid 5%	20min	5
Ammonia 10% sol	960' (16h)	5
Ethylacohol 50%	1440' (24h)	5
Coffee	960' (16h)	5
Water	1440' (24h)	5
Acetone	960' (16h)	5
Mustard	1440' (24h)	5
NaOH 25% sol	10min	5
Adhesion	Cross-cut EN ISO 2409 Cross- cut and adhesive tape	0
Resistance to surface wear	(PrEN13329) S42 revolutions to IP	400
	(ASTM4060)CS17 revolution to IP	>15000
	Wear-Index mg abr./1000cycles	35
Resistance to impact	By small diameter ball EN 438-2.11(N)	<3
Resistance to scratching	EN 438-2.14(N)	2
Flammability	DIN 51960	K1

Test Results of RELMAT Solid Parquet

Formaldehyde	mg/100cm ² /day in 35°C	< 0,05
Arsenic	mg/kg	< 0,05

** The tests were conducted in Certified Laboratory*